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Follow the steps listed below to get started:

Step 1: Check kit contents.

- LES1202A, LES1203A-M, LES1203A-11G, or LES1204A-R2 Remote Console Manager
- This printed quick start guide
- (2) UTP cables
- (1) DB9F-RJ-45 adapter straight-pinned
- (1) DB9F-RJ-45 adapter crossover-pinned
- Universal input 12-VDC power pack
- CD-ROM containing SDT Connector and PortShare software

NOTE: To download the user manual, go to ftp://ftp.blackbox.com/anonymous/manuals/L/les1202a_user_rev2.pdf, or visit the Black Box Web site and enter LES1202A in the search bar.

Step 2: Connect the hardware.

- Plug the power pack into the AC power receptacle and connect the DC power cable to the 9-12 VDC power socket on the Remote Console Manager.
- Connect the LAN port to your network.
- Connect your serial devices to the *SERIAL* ports. Your Remote Console Manager has two, three, or four RJ-45 serial ports. The RJ-45 serial connectors have *Cisco*® serial pinouts:

	female	PIN	SIGNAL	DEFINITION
	RJ-45 CTS	1	CTS	Clear To Send
1	1 DSR	2	DSR	Data Set Ready
	3 RD	3	RXD	Receive Data
	4GND	4	GND	Signal Ground
8 1	5 TD	5	GND	Signal Ground
	6 DTR	6	TXD	Transmit Data
	8 RTS	7	DTR	Data Terminal Ready
		8	RTS	Request To Send

Figure 1. Cisco serial pinouts.

NOTE: If you have a LES1203-M and plan to use out-of-band (OoB) dial-in access, connect the internal modem to the phone line.

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Step 3: Set up the remote console manager.

The default remote console manager IP address is 192.168.0.1 (subnet mask 255.255.255.0). With a Web browser on any computer that is connected through the LAN to the serial device server:

• Enter https://192.168.0.1 into the address bar.

NOTE: The LAN-connected computer must have an IP address in the same network range (192.168.0.xxx) as the remote console manager. If this is not convenient, you can use the ARP Ping command to set the IP address (refer to the user manual for details). The remote console manager also has its DHCP client enabled by default, so it will automatically accept any network IP address assigned by any DHCP server on your network—and will then respond at both 192.168.0.1 and its DHCP address.

- Log in using the default system user name: root, and the default password: default. A Welcome screen listing the basic configuration steps is displayed.
- Select "System: Administration," enter and confirm a new system password, and click "Apply."

		System Name: ACSdoc Model LES1216A. Farmware: 2.8.0u2 Uptime: 0 days, 0 hours, 32 mins, 46 secs Current User: root Essue Leg Out
		System: Administration
Serial & Network Serial Port Users & Groups	System Name	ACSdoc An ID for this device.
Authentication Network Hosts Trusted Networks Cascaded Ports UPS Connections RPC Connections	System Description	The physical location of this device.
	System Password	The secret used to gain administration access to this device.
Environmental Managed Devices	Confirm System Password	Re-enter the above password for confirmation.
Alerts & Logging Port Log	Apply	

Figure 2. System: Administration screen.

 To assign your remote console manager a static IP address or to permanently enable DHCP, select "System: IP" then "Network Interface" and check "DHCP" or "Static" for configuration method.

NOTE: By default, only HTTPS and SSH access is enabled to the Remote Console Manager itself. Use Service Access menu on System: Firewall to change this, and to change access privileges for connected serial and network devices. Similarly, use the Forwarding & Networking menu to permit remote IP access to devices on Network or Management LAN.

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Step 4: Configure serial and network devices.

• Select "Serial & Network: Serial Port," which will display the label, mode, and protocol options currently set for the serial port. By default, all the serial ports, except Port 1, are set to console server mode (see the user's manual for other modes).

	BOX		System Name: AC Uptime: 0 days, 0	Sdoc Modet hours, 52 mil	LES1216A Firm ns, 27 secs Our	ware: 2.8.0u2 rent User: root	Bashup L
					Serial 8	Network:	Serial F
Serial & Network Serial Port Users & Groups			Ports 1-8 Ports	9-16			
Authentication Network Hosts	Port#	Label	Mode	Logging Level	Parameters	Flow Control	
Trusted Networks Cascaded Ports	1	Port 1	Console (Unconfigured)	0	9500-8-N-1	None	6
UPS Connections	2	Port 2	Console (Unconfigured)	0	9500-8-N-1	None	E
Environmental	3	Port 3	Console (Unconfigured)	0	9600-8-N-1	None	6

Figure 3. Serial & Network: Serial Port screen.

- To configure a serial port, click "Edit."
- Configure the common settings (baud rate, parity, data bits, stop bits, and flow control) to match those of the serial device being controlled.
- Select the console server protocols (Telnet, SSH, TCP, and RFC2217) that will be used for the data connection to the serial port.

NOTE: Port 1 is configured by default in Local Console (modem) mode. Use the crossover-pinned DB9F-RJ-45 adapter and UTP cable to connect to a terminal emulator application on your PC's serial COM port. If you plan to use OoB dial-in access, connect this serial port to an external modem as covered in detail in the user manual on the CD-ROM.

- Click "Apply."
- To enable access through the remote console manager to a locally networked computer (referred to as a host), select "Serial & Network: Network Hosts" and click "Add Host."

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Remote Console Manager Quick Start Guide

NETWORK S	BERVICES	obime. O days, 2 hours, 13 mins, 1 secs Current User. root 📰 😪 Dadwp Log O
		Serial & Network: Network Host
Serial & Network Serial Port Users & Groups	IP Address/DNS Name	The host's IP Address or DNS name.
Authentication Network Hosts Trusted Networks	Host Name	A descriptive name to identify the host.
UPS Connections RPC Connections Environmental	Description/Notes	A brief description of the host.
Managed Devices Alerts & Logging Port Log Alerts SMTP & SMS SNMP	Permitted Services	22/tcp (ssh) - 0 23/tcp (telme0 - 0 00/tcp (thtp) - 0 443/tcp (thtps) - 0 1494/tcp (tca) - 0 3390/tcp (tdp) - 0 5900/tcp (vnc) - 0
System Administration SSL Certificates Configuration Backup		UDP Port level 0 - Disabled
Firmware IP Date & Time		Add The TCP services available from this host.
Dial Services DHCP Server	Device Settings	
Nagios Configure Dashboard	Device Type	None device type.

Figure 4. Serial & Network: Network Hosts screen.

- Enter the IP address/DNS name of the host.
- Edit the permitted services used for accessing this host, for example, HTTPS (TCP port 443), VNC (TCP port 5900), or add custom TCP or UDP port numbers—only the services specified here are tunneled through to the host. All other services are blocked.
- Specify the level of information to be logged and monitored for each host access.
- Click "Apply."

Step 5: Add new users.

NOTE: We recommend that you set up a new Administrator user (in the admin group with full access privileges) and log in as this new user for all ongoing administration functions (rather than continuing as root).

- For each new user, select "Serial & Network: Users & Groups" and click "Add User."
- Enter a username and enter and confirm a password, and nominate the accessible hosts and accessible ports the user is allowed to access.

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	BOX	System Name ACSdoc Model LE31214A Firmware 2.8.02 Uptime 0 days, 1 hours, 2 mins, 8 secs Current User root Beau Log 0				
		Serial & Network: Users & Group				
Serial & Network Serial Port	Add a New u	ser				
Users & Groups Authentication Network Hosts	Username	A unique name for the user.				
Trusted Networks Cascaded Ports UPS Connections	Description	A brief description of the users role.				
RPC Connections Environmental Managed Devices	Groups	admin (Provides users with unlimited configuration and management privileges) users (Provides users with basic management privileges)				
Alerts & Logging	1	A group with predefined privileges the user will belong to.				
Port Log Alerts SMTP & SMS	Password	The users authentication secret. Note: A password may not be required if remote authentication is being used.				
SNMP	Confirm	Re-enter the users password for confirmation.				
Administration SSL Certificates Configuration Backup	Accessible H	iost(s)				
Firmware IP Date & Time	No hosts curr	ently configured.				
Services DHCP Server	Accessible P	fort(s)				

Figure 5. Serial & Network: Users & Groups screen.

- To grant limited access to the management console, check the "User" group. To grant full access to the management console, check the "Admin" group. By default, the user is granted no management console access.
- Click "Apply."

NOTE: The Remote Console Manager comes with a default certificate for initial configuration purposes only. You will need to direct your browser to (temporarily) proceed and accept this untrusted certificate. It is recommended as soon as possible thereafter you generate and install a new trusted certificate. To produce the unique CSR and later upload the newly issued certificate, select System: SSL Certificates.

Step 6: Custom setup.

The Remote Console Manager family has various models that may require some custom setup:

- LES1203A-M has an internal modem that can be configured for dial-in access (or dial-out failover connection) using the Internal Modem Port tab under System: Dial menu.
- LES1203A-11G comes with an internal 802.11 wireless modem that can be configured using the Wireless LAN Interface menu in the System: IP menu. The wireless LAN is deactivated by default and when enabled will operate as the main network connection. Failover is available (though it is not *enabled* by default).
- LES1204A-3G-R2 comes with an internal 3G cellular modem— and its own Quick Start Guide.

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Step 7: Advanced configurations.

The console server offers many more advanced functions, including:

- The Alerts & Logging: Alerts facility monitors serial ports, hosts, user logins, UPSs (uninterruptible power supplies), and RPCs (remote power controllers such as PDUs and IPMI devices). A broad selection of trigger events (such as data patterns, temperature, or battery levels) can be specified. When triggered, a warning e-mail, SMS, Nagios®, or SNMP alert is sent to a nominated destination.
- Extensive management of UPSs and RPCs using Open Source NUT and Powerman tools. The Manage: Power facility enables both administrators and regular users to monitor and control attached PDU power strips, and servers with embedded IPMI BMCs.
- Historical logs of all communications with serial and network-attached devices, system activity, UPS and PDU power status, environmental status, etc. The level of logging is set as ports and devices are configured. Alerts & Logging: Port Log allows this history to be saved locally or remotely. Logs can be viewed from the Status and Manage menus.
- Other advanced features, such as serial port cascading, remote authentication, trusted networks, secure tunneling, Nagios distributed monitoring, and the command line interface are covered in detail in the user manual.

NOTE: To download the user manual, go to ftp://ftp.blackbox.com/anonymous/manuals/L/les1202a_user_rev2.pdf, or visit the Black Box Web site and enter LES1202A in the search bar.

NOTE: Also on the Black Box Web site, you will find the SDT Connector software tool. Once you have configured the console server, this tool provides you with secure, point-and-click access to the console server and all the attached devices. Refer to the provided SDT Connector Quick Start for details on setting up remote management of the console server and connected devices.

NOTE: Also on the Black Box Web site, you will also find PortShare software, which enables applications on your Windows® or Linux® PC/server/virtual server to control serial port devices attached to a Remote Console Manager. To use PortShare, configure the Remote Console Manager serial port in console server mode and specify the appropriate protocol (either RFC2117 or RAW) to be used (see the user's manual for details).

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